

A NEW SPECIES OF *SARGUS* (DIPTERA, STRATIOMYIDAE, SARGINAE) FROM ANHUI, CHINA

YANG Zai-Hua¹, YU Jin-Yong¹, YANG Mao-Fa^{2*}

1. Guizhou Academy of Forestry, Guiyang 550005, China

2. The Provincial Key Laboratory for Agricultural Pest Management of Mountainous Region; Institute of Entomology, Guizhou University, Guiyang 550025, China

Abstract A new species of the genus *Sargus* Fabricius, 1798, i. e. *S. huangshanensis* sp. nov. collected from Huangshan, Anhui Province, China, is described and illustrated. The type specimens are deposited in the Institute of Entomology, Guizhou University, China (GUGC).

***Sargus huangshanensis* sp. nov.** (Figs 1–9)

This new species is very similar to *Sargus rufifrons* Pleske, 1926, but can be distinguished by the frons and face yellow, not reddish brown; legs wholly yellow without any dark part.

♂ Body length 6.5–8.0 mm, wing length 5.5–6.5 mm. Thorax shining metallic dark green, densely punctated and gray haired; humerus, postalar callus and upper margin of anepisternum yellow; mesopleuron and sternum shining dark brown to black, but with light margin and with white hairs. Wing hyaline, veins brownish yellow. Legs wholly yellow. Abdomen black with shining brass. Male terminalia exposed; the width of proctiger wider than

the length, middle of hind margin depressed; the width of gonocoxite wider than the length, the hind margin straight, middle with a pit; gonostyle foliaceous, with a oblique spine at base; aedeagal complex with slender base, apex tripartite, lateral lobes slightly longer than the middle.

♀ Body length 6.0–7.0 mm, wing length 5.5–6.0 mm. Similar to male except as follows: eyes widely separated; the frontal width of just above antenna about as 0.3 times of the width of head, frontal frons brownish yellow, protuberant, with a distinct dividing line between upper and under frons; dorsum of abdomen sometimes shining with violet; female terminalia with two-segmented cerci.

Etymology. The species is named after the type locality Huangshan.

Holotype ♂; **paratypes**: 4 ♂♂, 4 ♀♀, Tangkou (30°N, 118.1°E; alt. 350 m), Huangshan, Anhui Province, 21 May 2008, YANG Zai-Hua leg.

Distribution. Anhui (Huangshan).

Key words Diptera, Stratiomyidae, Sarginae, *Sargus*, new species.

中国安徽瘦腹水虻一新种记述 (双翅目, 水虻科, 瘦腹水虻亚科)

杨再华¹ 余金勇¹ 杨茂发^{2*}

1. 贵州省林业科学研究院 贵阳 550005

2. 贵州省山地农业病虫害重点实验室, 贵州大学昆虫研究所 贵阳 550025

摘要 记述了安徽黄山风景名胜区瘦腹水虻属 *Sargus* Fabricius, 1798 1 新种, 黄山瘦腹水虻 *Sargus huangshanensis* sp. nov.。详细描述了其形态特征, 并绘制了其鉴别特征图, 所有标本均保存在贵州大学昆虫研究所。

关键词 双翅目, 水虻科, 瘦腹水虻亚科, 瘦腹水虻属, 新种。

中图分类号 Q969.447.5

瘦腹水虻属 *Sargus* 属于水虻科 Stratiomyidae 瘦腹水虻亚科 Sarginae, 系 Fabricius, 1798 年根据 *Musca cupraria* Linne, 1759 为模式种建立的。根据

Woodley (2001) 的世界水虻科名录, 共记录该属 103 种, Mason & Rozkosny (2008) 描述欧洲 1 新种, 目前世界已知 104 种。中国在该属的研究历史

* Corresponding author, E-mail: yangmaofa@sohu.com

This research was supported by the Provincial Foundation for Science and Technology Field of Guizhou (20112168), the National Natural Science Foundation of China (31101666) and the Construction Project for Innovation Ability on Sustainable Management of Public Welfare Forest of Guizhou (20094002). (贵州省科学技术基金 ([2011] 2168 号), 国家自然科学基金 (31101666) 和贵州省公益林可持续经营技术研究创新能力建设项目 (黔科合院所创能 [2009] 4002 号) 资助)

Received 19 Dec. 2011, accepted 21 Feb. 2012.

也很久远, Macquart 1855 年报道了该属中国第 1 个新种, 而后相继有 Schiner (1868)、Pleske (1926)、James (1942)、Curran (1927)、杨集昆和陈刚 (1993)、史永善 (2003) 和杨定 (2004, 2005) 等进行过部分研究。目前中国已知 12 种, 即红斑瘦腹水虻 *S. mactans* Walker, 1859、丽瘦腹水虻 *Sargus metallinus* Fabricius, 1805、黄足瘦腹水虻 *Sargus flavipes* Meigen, 1822、芽指突水虻 *Sargus gemmifer* Walker, 1849、绿纹瘦腹水虻 *Sargus viridiceps* Macquart, 1855、柑桔瘦腹水虻 *Sargus mandarinus* Schiner, 1868、日本瘦腹水虻 *Sargus nipponensis* Bigot, 1879、红额瘦腹水虻 *Sargus rufifrons* (Pleske, 1926)、巨瘦腹水虻 *Sargus goliath* (Curran, 1927)、大瘦腹水虻 *Sargus grandis* (Ôuchi, 1938)、万氏瘦腹水虻 *Sargus vandykei* (James, 1941) 和棒瘦腹水虻 *Sargus baculventerus* Yang et Chen, 1993。

通过研究, 本文添记 1 新种。

黄山瘦腹水虻, 新种 *Sargus huangshanensis* sp. nov. (图 1~9)

雄 体长 6.5~8.0 mm; 翅长 5.5~6.5 mm。

头半球形, 背面观头宽为头长的 2.1 倍; 侧面观头近半圆形, 正面观椭圆形, 高为头长的 1.3 倍, 约为宽的 0.7 倍; 复眼红棕色, 光裸, 接眼式; 颅顶暗棕色, 光裸; 单眼瘤暗棕色闪光, 明显隆起, 具稀疏的棕黄色长毛; 触角柄和梗节黄色, 被黑色长毛; 柄梗节约等长, 梗节约宽于柄节; 鞭节橘黄色, 基部呈梭形, 端部着生黑色的长芒; 触角比(除芒)为 1:1:4。上额三角小, 棕色, 光裸。前额三角稍隆起, 黄色被稀疏的棕黄色长毛; 颜上部黄色被棕黄色长毛, 下部明显变暗; 后头凹陷, 侧面观, 几乎不可见, 黑色被黄白色毛, 下部毛较上部毛长; 喙棕黄色被黄色毛; 须黄色。

中胸背板和小盾片暗绿色金属闪光, 密被刻点和稀疏的灰白色长毛; 肩胛、翅后胛、前胸侧板上缘从肩胛到翅基的宽带和翅基片黄色; 中胸侧板和腹板暗棕色至黑色闪光, 但边缘色淡, 被黄白色长毛。翅透明, 略带黄色, 膜质部分密被微毛; 翅脉棕黄色。足全黄色, 被黄色短毛。平衡棒黄色, 柄棕黄色。

腹部背板黑色, 略带黄铜色闪光, 被灰白色几乎直立的长毛; 腹面暗棕色被匍匐的稍短的灰白色毛。生殖器黄色, 外露; 第 9 背片宽明显大于长, 后缘中央稍凹陷; 生殖突基节宽大于长, 后缘较平直, 但中央具明显的凹陷; 生殖刺突片状, 基部背面着生一几乎为刺突 1/2 长的齿状结构; 阴茎复合体端部 3 分叉, 两侧叶较中叶稍长, 阴茎复合体基部细瘦且较尖。

雌 体长 6.0~7.0 mm; 翅长 5.5~6.0 mm。似雄, 复眼明显远离; 额向前渐变窄, 额在触角上方的宽约为头宽的 0.3 倍, 前额棕黄色, 突起与上额分界明显; 头高约为头长的 0.7 倍。腹部背板有时带有紫色光泽, 尾须 2 节。

正模 ♂, 2008-05-21, 安徽黄山, 汤口, 海拔 350 m, 杨再华采。副模: 4 ♂♂, 4 ♀♀, 同正模。

分布: 安徽(黄山)。

词源: 新种种名以模式产地命名。

讨论: 新种近似红额瘦腹水虻 *Sargus rufifrons* (Pleske, 1926), 虽然 Pleske (1926) 因标本损坏在红额瘦腹水虻的原始描述中未对触角鞭节和腹部的描述, 但其额为红棕色, 足仅前足黄色, 而中、后足中部黑色具绿色闪光和黄化的端部; 后足黄色但后胫基部棕黄色。而新种额和颜呈黄色, 足全黄色, 从而可以与其区别。

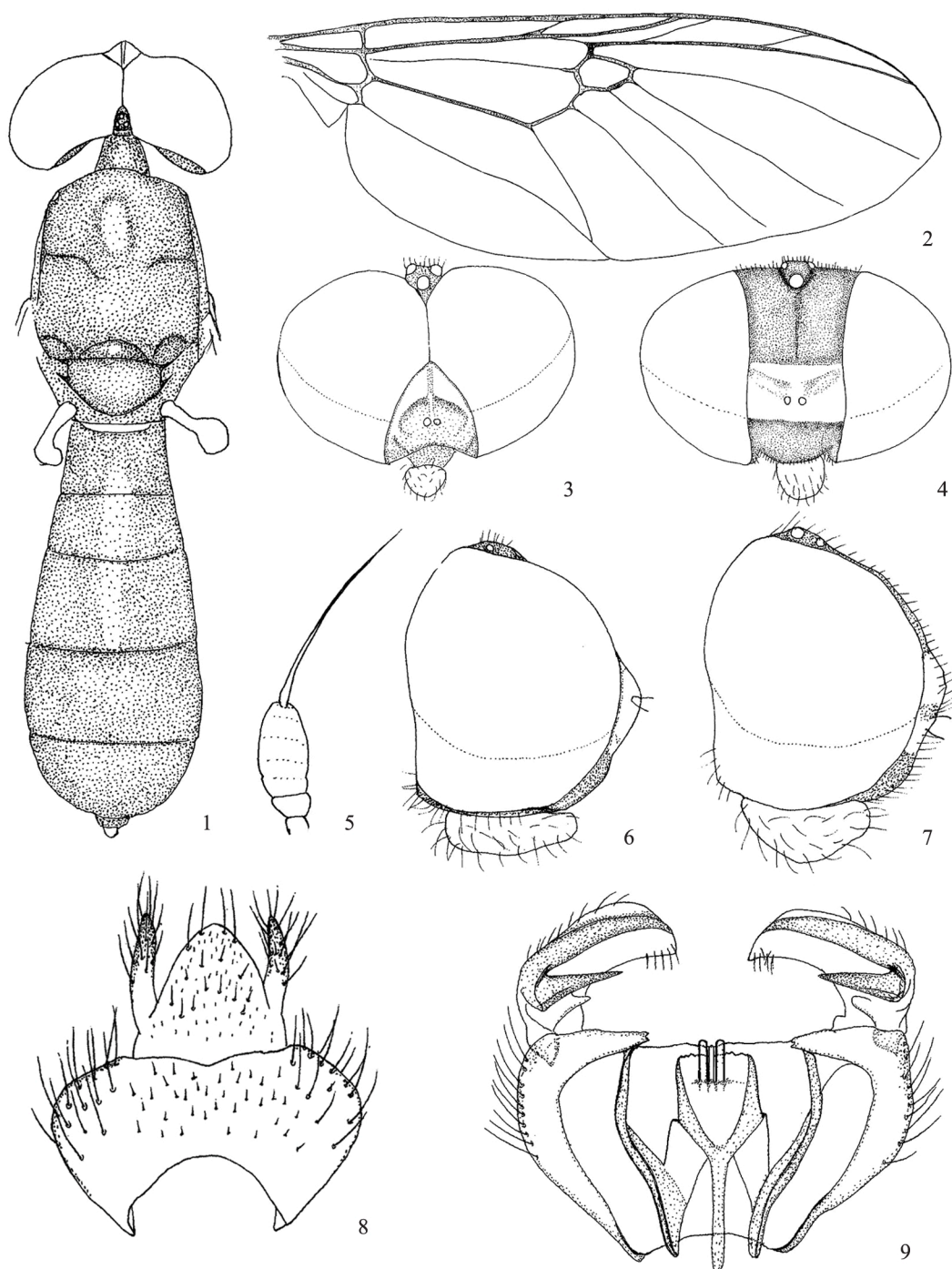


图1~9 黄山瘦腹水虻, 新种 *Sargus huangshanensis* sp. nov.

1. 雄体背面观 (♂, body, dorsal view) 2. 翅 (wing) 3. 雄头前面观 (♂, head, frontal view) 4. 雌头前面观 (♀, head, frontal view) 5. 触角 (antenna) 6. 雄头侧面观 (♂, head, lateral view) 7. 雌头侧面观 (♀, head, lateral view) 8. 载肛突、尾须和第9背片背面观 (proctiger, cerci and epandrium, dorsal view) 9. 生殖囊和阳茎复合体背面观 (genital capsule and aedeagal complex, dorsal view)

REFERENCES

- Bigot, J. M. F. 1879. Diptères nouveaux ou peu connus. 11. ° partie. X VI. Curiae Xylophagidarum et Stratiomyidarum (Bigot) [part]. *Annales de la Société Entomologique de France, Cinquième Série*, 9: 209-234.
- Curran, C. H. 1927. New neotropical and oriental diptera in the American Museum of Natural History. *American Museum Novitates*,

245: 1-9.

- Fabricius, J. C. 1798. Supplementum Entomologiae Systematicae. Proft et Storch, Hafniae [= Copenhagen]. 4, 1-572.
- Fabricius, J. C. 1805. Systema Antliatorum Secundum Ordines, Genera, Species Adiectis Synonymis, Locis, Observationibus, Descriptionibus. Carolus Reichard, Brunsvigae. I - XIV, 15-172. 4, 1-30.
- James, M. T. 1941. New species and records of Stratiomyidae from

- Paleartic Asia (Diptera). *The Pan-pacific Entomologist*, 17 (1): 14–22.
- Macquart, P. J. M. 1855. Diptères Exotiques Nouveaux ou peu Connus. 5.^e Supplément. *Mémoires de la Société des Impériaux des Sciences de l'Agriculture et des Arts de Lille*, II. 6^e Série, 1: 25–156.
- Mason, F. and Rozkošný, R. 2008. A new species of *Sargus* Fabricius, 1798 from Europe (Diptera, Stratiomyidae). *Deutsche Entomologische Zeitschrift*, 55 (2): 303–309.
- Meigen, J. W. 1822. Systematische Beschreibung der Bekannten Europäischen Zweiflügeligen Insekten. Dritter Theil. Schulz-Wundermann, Hamm. I – X, 1–416.
- Ōuchi, Y. 1938. On Some Stratiomyid flies from Eastern China. *J. Shanghai Sci. Inst.*, (Sect. 3), 4: 37–61.
- Pleske, T. 1926. Etudes sur les Stratiomyidae de la region palearctique (Diptera). *Eos*, 2: 385–420.
- Schiner, J. R. 1868. Diptera. In: Reise der Österreichischen Fregatte Novarra um die Erde in den Jahren 1857, 1858, 1859, unter den Befehlen des Commodore B. von Wüllerstorff-Urbair. Zoologischer Theil, 2, 1 (B). Kaiserlich-königlichen Hof- und Staatsdruckerei in commission bei Karl Gerold's Sohn, Wien. I – VI, 1–388.
- Shi, Y-S 2003. Stratiomyidae. In: Huang, B-K (ed.), Fauna of Insects in Fujian Province of China. Vol. 8. Fujian Science and Technology Publishing House, Fuzhou. 183–187.
- Walker, K. 1849. List of the Specimens of Dipterous Insects in the Collection of the British Museum. Part III. British Museum, London. 4, 485–687.
- Walker, K. 1859. Catalogue of the dipterous insects collected at Makassar in Celebes, by Mr. A. R. Wallace, with descriptions of new species [part]. *Journal of the Proceedings of the Linnean Society*, 4 (15): 97–144.
- Woodley, N. M. 2001. A world catalog of the Stratiomyidae (Insecta: Diptera). *Myia*, 11: 1–475.
- Yang, J-K and Chen, G 1993. In: Huang, F-S (ed.), Insects of Wuling Mountain Area in Southwest China. Science Press, Beijing. 585–587.
- Yang, D 2005. Stratiomyidae (Diptera). In: Yang, X-K (ed.), Insect Fauna of Middle-West Qinling Range and South Mountains of Gansu Province. Science and Technology Publishing House, Gansu. 738–739.
- Yang, D, Gao, C-X and An, S-W 2004. Stratiomyidae (Diptera). In: Yang, X-K (ed.), Insect Fauna of Mt. Shiwandashan Area of Guangxi. China Forestry Publishing House, Beijing. 353–355.